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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,672	11/27/2001	Noritaka Mochizuki	35.C16000	8041
5514	7590	12/17/2003	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			QUARTERMAN, KEVIN J	
30 ROCKEFELLER PLAZA				
NEW YORK, NY 10112			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/993,672

Applicant(s)

MOCHIZUKI ET AL. 

Examiner

Kevin Quarterman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The following title is suggested: --DISPLAY DEVICE HAVING CONICAL TRANSPARENT MEMBERS COVERING ELECTROLUMINESCENT ELEMENTS--.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US 5668649).
5. Regarding independent claim 1, Figure 1 of Suzuki shows a display device comprising a transparent substrate (SUB1); a plurality of electroluminescent elements arranged on the transparent substrate, each of the electroluminescent elements being formed by sequentially laying a transparent electrode (AS), an electroluminescent layer (d0) and a reflector electrode (DL) on the transparent substrate; transparent members (PSV1) having a profile of a frustum of pyramid or cone and covering the electroluminescent elements; and reflection films (ORI1) formed on the surfaces of the transparent members.

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6. Regarding claim 2, Figure 1 of Suzuki shows a plurality of drive elements (d1), the drive elements being coated with the transparent members.
7. Regarding claim 3, Figure 1 of Suzuki shows an insulating body (G1) filling the gaps separating the transparent members and wires formed on the insulating body, the drive elements being connected to the wires.
8. Regarding claim 4, Figure 1 of Suzuki shows an insulating body (G1) filling gaps separating the transparent members of wires formed on the insulating body.
9. Regarding claims 5-6, Figure 1 of Suzuki shows each of the electroluminescent elements comprising a half mirror (SIO) arranged between the transparent substrate and the transparent electrode.
10. Regarding claim 7, Figure 1 of Suzuki shows a light-absorbing layer (d2) arranged between the reflector electrode and the electroluminescent layer.
11. Regarding claim 8, Figure 1 of Suzuki shows an electron transport layer (d3) arranged at the side of the reflector electrode.
12. Regarding claim 9, Figure 1 of Suzuki shows a silica film layer (SIO) arranged between the transparent substrate and the transparent electrode.
13. Regarding claim 10, Figure 1 of Suzuki shows an air gap (not labeled) formed between the transparent substrate and the transparent electrode.
14. Regarding independent claim 11, Suzuki discloses like limitations of independent claim 1, as discussed earlier. Figure 1 of Suzuki also shows each of the transparent members (PSV1) having a curved surface showing a positive curvature.

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15. Regarding claim 12, Figure 1 of Suzuki shows the reflection film as a concave mirror relative to the electroluminescent element.
16. Regarding claim 13, Figure 1 of Suzuki shows a plurality of drive elements (d1), the drive elements being coated with the transparent members.
17. Regarding claim 14, Figure 1 of Suzuki shows an insulating body (G1) filling the gaps separating the transparent members and wires formed on the insulating body, the drive elements being connected to the wires.
18. Regarding claim 15, Figure 1 of Suzuki shows an insulating body (G1) filling gaps separating the transparent members of wires formed on the insulating body.
19. Regarding claims 16-17, Figure 1 of Suzuki shows each of the electroluminescent elements comprising a half mirror (SIO) arranged between the transparent substrate and the transparent electrode.
20. Regarding claim 18, Figure 1 of Suzuki shows a light-absorbing layer (d2) arranged between the reflector electrode and the electroluminescent layer.
21. Regarding claim 19, Figure 1 of Suzuki shows an electron transport layer (d3) arranged at the side of the reflector electrode.
22. Regarding claim 20, Figure 1 of Suzuki shows a silica film layer (SIO) arranged between the transparent substrate and the transparent electrode.
23. Regarding claim 21, Figure 1 of Suzuki shows an air gap (not labeled) formed between the transparent substrate and the transparent electrode.

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### **Conclusion**

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ejiri (US 6208390) discloses an electrode substrate resistant to wire breakage. Harada (US 4534622) discloses a solid-state device with optical functions. Taniguchi (US 5275967) discloses an electric field light-emitting device. Yokoyama (US 6607277) discloses a projector display. Uenae (JP 3-152898) discloses a distributed-type EL element.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (703) 308-6546. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*Joseph Williams*  
*for*

Kevin Quarterman  
Examiner  
Art Unit 2879

Nimesh Patel  
Supervisory Patent Examiner  
Art Unit 2879

kq *ke*  
December 14, 2003